

# Randolph Eastern Energy Project

Randolph Eastern  
School Corporation  
Union City, IN

# Wind Turbine



Bergey Windpower BWC  
XL.1

(<http://www.bergey.com/>)

- 90' tower with guy wires
- 8' diameter blades
- 1-kW power rating





# Solar Panels



Evergreen EC-115 Modules  
([www.evergreensolar.com](http://www.evergreensolar.com))

- Rated at 920 watts
- Approximately 8' X 10'



# Energy Monitoring System



Measures and records once every minute  
Monitors energy production and  
environmental factors

# Randolph Eastern School — Union City, IN

VIEW

Simple

Detail

System Size: .920 kW DC

AC OUTPUT

DC INPUT

Energy

Power

Voltage

Current

Energy

Performance

Environmental

Ambient Temp. 17 °F

Cell Temp. 22 °F

Irradiance 516 W/m<sup>2</sup>

Wind Speed 14 mph

Wind Dir. W

Today Week Month

Last update 12:52 PM Jan 30, 2009

[enlarge](#)

Solar 0 Wh

Wind 3,093 Wh

Energy - Today















